

Burns & McDonnell
ENGINEERS ARCHITECTS CONSULTANTS

075B
SITE Elliott's Shooting Park
ID# MO98086833
BREAK 2 Burns & McDonnell
OTHER 12-7-87

December 7, 1987

Mr David Crawford
U S Environmental Protection Agency
Region VII
726 Minnesota Avenue
Kansas City KS 66101

Elliott's Shooting Park
Raytown, Missouri
Project No 85-170-4

Dear Mr Crawford

The purpose of this letter is to provide the latest sampling results of the western portion of the former Elliott's Shooting Park. It will fulfill the requirements of the "Revised Work Plan for Removal, Sampling and Analysis at the Elliott Shooting Park," Part III, Section I.

The western portion of the site was first sampled between May 20 and May 26, 1987, in accordance with the Revised Work Plan. The results were summarized in a letter to you from H. Tom Brown, dated July 7, 1987. Since the composite samples from Areas S, R, and J, the drainage ditch and Rows 1, 4 and 6 of Area I exceeded the 500 mg/kg criteria for lead, these areas required additional soil removal. Areas S, J and the drainage ditch required several soil removals in order to reach the 500 mg/kg criteria.

Enclosed is a table showing the final composite value for each area, and the corresponding sample date and lab number. This will facilitate locating the sample analysis on the enclosed Laboratory Reports from Wilson Laboratories.

In order to prevent recontamination of the western portion of the site, the following measures have been implemented:

- o Equipment from the eastern portion of the site has been kept off the cleaned areas of the western portion of the site.
- o On the advice of EPA, bales of straw have been placed along the fence line separating the eastern and western portions. This will prevent sediment from migrating from the unclean areas to the clean areas.

40165726



SUPERFUND RECORDS

100% EMPLOYEE OWNED

Burns & McDonnell

Mr David Crawford

December 7, 1987

-2-

We request that the western portion of the site be released for development. If you have any questions concerning any of the data, please contact me

Sincerely,

Mary J Erlo

MJE/gph

Enclosure

cc Bill Dexter

<u>Area</u>	<u>Sample Date</u>	<u>Lab Number</u>	<u>Lead Level (mg/kg)</u>
H, A, B, C, D Composite	5/20/87	87060429 ✓	220
E, F, G, N U (Background Sample Designated ZZ)	5/20/87	87060431 ✓	40
K, L M, T Composite	5/20/87	87060433 ✓	300
	5/26/87		
R-1 thru R-7 Composite	5/26/87	87060465 ✓	490
I-2	5/20/87	87070226 ✓	350
I-3	5/20/87	87070227 ✓	440
I-5	5/20/87	87070229 ✓	310
I-7	5/20/87	87070231 ✓	450
I-1, I-4, I-6 Composite	8/25/87	87091061 ✓	362
S-1 thru S-7 Composite	9/24/87	87101261 ✓	495
J	11/03/87	87120168 ✓	38
Drainage Ditch (Designated Trench 3)	10/01/87	87101791 ✓	69

ENGINEERS - ARCHITECTS - CONSULTANTS

Attention Mr David Crawford

Via US mail

Subject Attachment to letter

Enclosed are the following

No. of copies	Description and Remarks
1	Copy of chemical analyses from Wilson. This should be attached to my letter to you dated December 7, 1981. I have also enclosed a copy of this letter for your information.

Very truly yours

Bv

May 7 1960

ATTACHMENT B
WILSON LABORATORIES

525 NORTH EIGHTH STREET - P O BOX 1884 - SALINA, KANSAS 67402-1884 - (913)825-7186

LABORATORY REPORT

PAGE 1

CLIENT BURNS & MCDONNELL
ATTN MARY ERIO
4800 E 63RD
KANSAS CITY, MO 64130

DATE RPID 06/15/87
DATE RCVD 05/21/87
PURCHASE AUTH
FILE NO 87-9523
ORDER NO 7051

LAB NUMBER 87060429
SAMPLE DESCRIPTION H,A,B,C,D COMPOSITE

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	220	MG/KG	986-39

—CONCLUSION—LAB NUMBER 87060429 H,A,B,C,D COMPOSITE

LAB NUMBER 87060430
SAMPLE DESCRIPTION TRENCH

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	1360	MG/KG	986-39

—CONCLUSION—LAB NUMBER 87060430 TRENCH

LAB NUMBER 87060431
SAMPLE DESCRIPTION ZZ

DATE SAMPLED 05/21/87

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD TOTAL	40	MG/KG	986-39

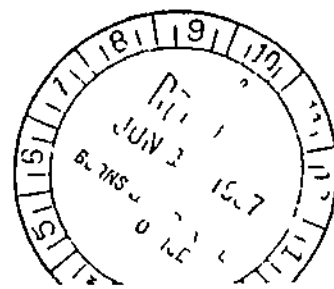
—CONCLUSION—LAB NUMBER 87060431 ZZ

LAB NUMBER 87060432
SAMPLE DESCRIPTION S-1 THRU S-7 COMPOSITE

DATE SAMPLED 05/22/87

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, EP TOXICITY	0.5	MG/L	986-163
LEAD, TOTAL	1760	MG/KG	986-302

—CONCLUSION—LAB NUMBER 87060432 S-1 THRU S-7 COMPOSITE



LABORATORY REPORT

PAGE 2

CLIENT BURNS & MCDONNELL

FILE NO 87-9523
ORDER NO 7051LAB NUMBER 87060433
SAMPLE DESCRIPTION K,L,M,T COMPOSITE

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	300	MG/KG	986-39

—CONCLUSION—LAB NUMBER 87060433 K,L,M,T COMPOSITE

ND(), WHERE NOTED, INDICATES NONE DETECTED WITH THE DETECTION LIMIT IN PARENTHESES

ANALYSES WERE PERFORMED ON SAMPLES AS RECEIVED IN ACCORDANCE WITH PROCEDURES
PUBLISHED IN THE FEDERAL REGISTER, VOL 49, NO 209, OCT 26, 1984 OR IN EPA
PUBLICATION, SW 846, 2ND EDITION, JULY 1982 AND IN THE PROPOSED ADDITION TO SW 846,
1984

SAMPLES WILL BE RETAINED FOR 30 DAYS UNLESS OTHERWISE NOTIFIED

IF YOU HAVE ANY QUESTIONS CONCERNING THIS REPORT, PLEASE CONTACT PROJECT MANAGER
CLIFFORD J BAKER , OR THE UNDERSIGNED

WILSON LABORATORIES


LYNN R NEWCOMER
CHIEF CHEMIST

WILSON LABORATORIES

525 NORTH EIGHTH STREET - P O BOX 1884 - SALINA, KANSAS 67402-1884 - (913)825-7186

LABORATORY REPORT

PAGE 1

CLIENT BURNS & MCDONNELL
ATTN MARY ERIO
4800 E 63RD
KANSAS CITY, MO 64130

DATE RPTD 06/16/87
DATE RCVD 05/27/87
PURCHASE AUTH
FILE NO 87-9523
ORDER NO 7061

LAB NUMBER 87060465

SAMPLE DESCRIPTION R-1 THRU R-7 COMPOSITE

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, EP TOXICITY	ND(0.2)	MG/L	986-163
LEAD, TOTAL	490	MG/KG	986-302

—CONCLUSION—LAB NUMBER 87060465 R-1 THRU R-7 COMPOSITE

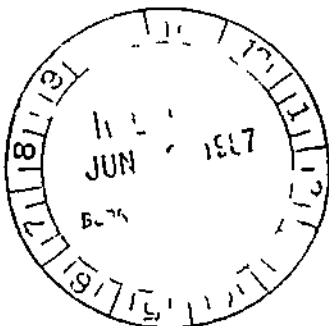
ND(), WHERE NOTED, INDICATES NONE DETECTED WITH THE DETECTION LIMIT IN PARENTHESES

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PUBLICATION, SW 846, 2ND EDITION, JULY 1982 AND IN THE PROPOSED ADDITION TO SW 846,
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WILSON LABORATORIES

Lynn R Newcomer
LYNN R NEWCOMER
CHIEF CHEMIST



LABORATORY REPORT

PAGE 4

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FILE NO 87-9523
ORDER NO 7341

LAB NUMBER 87070223 (CONT)

<u>ANALYSIS</u>	<u>CONCENTRATION</u>	<u>UNITS</u>	<u>BOOK/PAGE</u>
LEAD, TOTAL	1870	MG/KG	996-126

—CONCLUSION—LAB NUMBER 87070223 J 6

LAB NUMBER 87070224
SAMPLE DESCRIPTION J 7

<u>ANALYSIS</u>	<u>CONCENTRATION</u>	<u>UNITS</u>	<u>BOOK-PAGE</u>
LEAD, TOTAL	1440	MG/KG	996-126

—CONCLUSION—LAB NUMBER 87070224 J 7

LAB NUMBER 87070225
SAMPLE DESCRIPTION I 1

<u>ANALYSIS</u>	<u>CONCENTRATION</u>	<u>UNITS</u>	<u>BOOK-PAGE</u>
LEAD, TOTAL	131000	MG/KG	996-126

—CONCLUSION—LAB NUMBER 87070225 I 1

LAB NUMBER 87070226
SAMPLE DESCRIPTION I 2

<u>ANALYSIS</u>	<u>CONCENTRATION</u>	<u>UNITS</u>	<u>BOOK-PAGE</u>
LEAD, TOTAL	350	MG/KG	996-126

—CONCLUSION—LAB NUMBER 87070226 I 2

LAB NUMBER 87070227
SAMPLE DESCRIPTION I 3

<u>ANALYSIS</u>	<u>CONCENTRATION</u>	<u>UNITS</u>	<u>BOOK-PAGE</u>
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CLIENT BURNS & McDONNELL

FILE NO 87-9523
ORDER NO 7341

LAB NUMBER 87070227 (CONT)

<u>ANALYSIS</u>	<u>CONCENTRATION</u>	<u>UNITS</u>	<u>BOOK/PAGE</u>
LEAD, TOTAL	440	MG/KG	996-126
—CONCLUSION—LAB NUMBER 87070227 I 3			

LAB NUMBER 87070228
SAMPLE DESCRIPTION I 4

<u>ANALYSIS</u>	<u>CONCENTRATION</u>	<u>UNITS</u>	<u>BOOK-PAGE</u>
LEAD, TOTAL	910	MG/KG	996-126
—CONCLUSION—LAB NUMBER 87070228 I 4			

LAB NUMBER 87070229
SAMPLE DESCRIPTION I 5

<u>ANALYSIS</u>	<u>CONCENTRATION</u>	<u>UNITS</u>	<u>BOOK-PAGE</u>
LEAD, TOTAL	310	MG/KG	996-126
—CONCLUSION—LAB NUMBER 87070229 I 5			

LAB NUMBER 87070230
SAMPLE DESCRIPTION I 6

<u>ANALYSIS</u>	<u>CONCENTRATION</u>	<u>UNITS</u>	<u>BOOK-PAGE</u>
LEAD, TOTAL	520	MG/KG	996-126
—CONCLUSION—LAB NUMBER 87070230 I 6			

LAB NUMBER 87070231
SAMPLE DESCRIPTION I 7

<u>ANALYSIS</u>	<u>CONCENTRATION</u>	<u>UNITS</u>	<u>BOOK-PAGE</u>
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LABORATORY REPORT

PAGE 6

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FILE NO 87-9523

ORDER NO 7341

LAB NUMBER 87070231 (CONT)

<u>ANALYSIS</u>	<u>CONCENTRATION</u>	<u>UNITS</u>	<u>BOOK/PAGE</u>
LEAD, TOTAL	450	MG/KG	996-126

—CONCLUSION—LAB NUMBER 87070231 I 7

ND(), WHERE NOTED, INDICATES NONE DETECTED WITH THE DETECTION LIMIT IN PARENTHESES

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WILSON LABORATORIES


LYNN R NEWCOMER
CHIEF CHEMIST

525 NORTH EIGHTH STREET - P O BOX 1884 - SALINA, KANSAS 67402-1884 - (913)825-7186

LABORATORY REPORT

PAGE 1

CLIENT BURNS & MCDONNELL
ATIN MARY ERIO
4800 E 63RD
KANSAS CITY, MO 64130

DATE RPTD 09/02/87
DATE RCVD 08/26/87
PURCHASE AUTH
FILE NO 87-9523
ORDER NO 8165

LAB NUMBER 87091060
SAMPLE DESCRIPTION COMPOSITE J-1 THRU J-7

DATE SAMPLED 08/25/87

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	1640	MG/KG	1042-78

—CONCLUSION—LAB NUMBER 87091060 COMPOSITE J-1 THRU J-7

LAB NUMBER 87091061
SAMPLE DESCRIPTION COMPOSITE I-1,I-4,I-6

DATE SAMPLED 08/25/87

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	362	MG/KG	1042-78

—CONCLUSION—LAB NUMBER 87091061 COMPOSITE I-1,I-4,I-6

LAB NUMBER 87091062
SAMPLE DESCRIPTION SS-5,

DATE SAMPLED 08/25/87

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	72600	MG/KG	1042-78

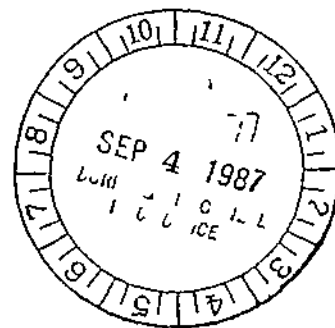
—CONCLUSION—LAB NUMBER 87091062 SS-5

LAB NUMBER 87091063
SAMPLE DESCRIPTION POND BOTTOM

DATE SAMPLED 08/25/87

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	561	MG/KG	1042-78

—CONCLUSION—LAB NUMBER 87091063 POND BOTTOM



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LABORATORY REPORT

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CLIENT BURNS & MCDONNELL
ATTN MARY ERIO
4800 E 63RD
KANSAS CITY, MO 64130

DATE RPID 10/14/87
DATE RCVD 10/02/87
PURCHASE AUTH
FILE NO 87-9523
ORDER NO 8581

LAB NUMBER 87101791
SAMPLE DESCRIPTION TRENCH 3

DATE SAMPLED 10/01/87

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	69	MG/KG	1072-76

--CONCLUSION--LAB NUMBER 87101791 TRENCH 3

LAB NUMBER 87101792
SAMPLE DESCRIPTION SS-5 PILE

DATE SAMPLED 10/01/87

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, EP TOXICITY	2 4	MG/L	1072-95

--CONCLUSION--LAB NUMBER 87101792 SS-5 PILE

LAB NUMBER 87101793
SAMPLE DESCRIPTION T-1 PILE

DATE SAMPLED 10/01/87

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, EP TOXICITY	0 5	MG/L	1072-95

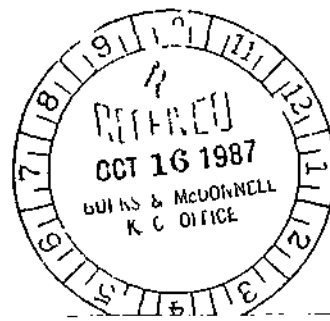
--CONCLUSION--LAB NUMBER 87101793 T-1 PILE

LAB NUMBER 87101794
SAMPLE DESCRIPTION T-2 PILE

DATE SAMPLED 10/01/87

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, EP TOXICITY	ND(0 2)	MG/L	1072-95

--CONCLUSION--LAB NUMBER 87101794 T-2 PILE



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LABORATORY REPORT

PAGE 1

CLIENT BURNS & McDONNELL
ATTN MARY ERIO
4800 E 63RD
KANSAS CITY, MO 64130

DATE RPTD 10/05/87
DATE RCVD 09/25/87
PURCHASE AUTH
FILE NO 87-9523
ORDER NO 8510

LAB NUMBER 87101261
SAMPLE DESCRIPTION S-1 THRU S-7 COMPOSITE

DATE SAMPLED 09/24/87

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	495	MG/KG	1063-209

—CONCLUSION—LAB NUMBER 87101261 S-1 THRU S-7 COMPOSITE

LAB NUMBER 87101262
SAMPLE DESCRIPTION SS-1 3"-6"

DATE SAMPLED 09/24/87
TIME SAMPLED 1005

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	19000	MG/KG	1063-209

—CONCLUSION—LAB NUMBER 87101262 SS-1 3"-6"

LAB NUMBER 87101263
SAMPLE DESCRIPTION SS-1 0-3"

DATE SAMPLED 09/24/87
TIME SAMPLED 0955

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	5900	MG/KG	1063-209

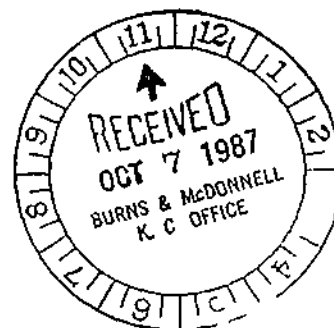
—CONCLUSION—LAB NUMBER 87101263 SS-1 0-3"

LAB NUMBER 87101264
SAMPLE DESCRIPTION SS-1 6"-12"

DATE SAMPLED 09/24/87
TIME SAMPLED 1020

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	2590	MG/KG	1063-209

—CONCLUSION—LAB NUMBER 87101264 SS-1 6"-12"



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LABORATORY REPORT

PAGE 1

CLIENT BURNS & McDONNELL
ATTN MARY ERIO
4800 E 63RD
KANSAS CITY, MO 64130

DATE RPTD 11/10/87
DATE RCVD 11/04/87
PURCHASE AUTH
FILE NO 87-9523
ORDER NO 8968

LAB NUMBER 87120168
SAMPLE DESCRIPTION J-1 THRU J-7 COMPOSITE

DATE SAMPLED 11/03/87

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	38	MG/KG	1087-113

—CONCLUSION—LAB NUMBER 87120168 J-1 THRU J-7 COMPOSITE

LAB NUMBER 87120169
SAMPLE DESCRIPTION SS-1

DATE SAMPLED 11/03/87

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	24000	MG/KG	1087-113

—CONCLUSION—LAB NUMBER 87120169 SS-1

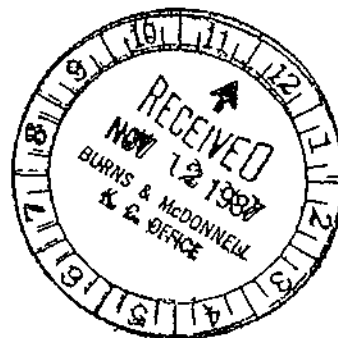
ND(), WHERE NOTED, INDICATES NONE DETECTED WITH THE DETECTION LIMIT IN PARENTHESES

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PUBLICATION, SW 846, 2ND ED, JULY 1982 AND IN THE PROPOSED ADDITION TO SW 846,
1984 OR IN EPA PUBLICATION SW846 3RD ED, SEPTEMBER 1986 WHERE APPROVED METHODS
ARE NOT AVAILABLE, EFFORTS ARE MADE TO USE APPROPRIATE STANDARD METHODS

SAMPLES WILL BE RETAINED FOR 30 DAYS UNLESS OTHERWISE NOTIFIED

WILSON LABORATORIES

Lynn R Newcomer
LYNN R NEWCOMER
CHIEF CHEMIST



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ATTN MARY ERIO
4800 E 63RD
KANSAS CITY, MO 64130

DATE RPTD 11/10/87
DATE RCVD 11/04/87
PURCHASE AUTH
FILE NO 87-9523
ORDER NO 8968

LAB NUMBER 87120168
SAMPLE DESCRIPTION J-1 THRU J-7 COMPOSITE

DATE SAMPLED 11/03/87

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	38	MG/KG	1087-113

—CONCLUSION—LAB NUMBER 87120168 J-1 THRU J-7 COMPOSITE

LAB NUMBER 87120169
SAMPLE DESCRIPTION SS-1

DATE SAMPLED 11/03/87

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
LEAD, TOTAL	24000	MG/KG	1087-113

—CONCLUSION—LAB NUMBER 87120169 SS-1

ND(), WHERE NOTED, INDICATES NONE DETECTED WITH THE DETECTION LIMIT IN PARENTHESES

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